

Challenges of Population Policies on Childbearing and Reproductive Health After the Islamic Revolution of Iran

Parviz Mirzaei¹, PhD; Nafiseh Vaez², PhD; Mohammad Hassan Talebian², PhD

Abstract

Background: The nature of population policies in the field of health, especially population, fertility, and childbearing is complicated, so the families' and policymakers' decision on the quantity and quality of the reproduction and the childbearing process has been controversial. This paper was conducted to identify and explain the adverse effects of population policies on reproductive health and childbearing in 1978-2020.

Methods: This study has a cross-sectional descriptive-analytical design. The study participants were 30 managers and specialists who studied in the fields of policy, demography, sociology, and health at university of medical sciences in Khuzestan in 2019-2020. Delphi method was used and the data collection tool was a researcher-made questionnaire that was standardized by calculating the validity and reliability using the Cronbach's alpha coefficient. The authors analyzed data using descriptive and inferential statistics. The main question was whether the population policies adopted after the Islamic Revolution have challenged decision-making on reproductive health and childbearing at both levels of operational managers and the society? The main hypothesis allocated the answer "yes" to itself. However, since policymakers still do not frequently use policy-making knowledge as a criterion for public policy, there is dissatisfaction and mistrust among families who have to implement the policies. Therefore the new message of the research is that in the future, any decision and manipulation on health and population should be all-inclusive and comprehensive along with conservatism and maturity.

Results: The significance level was observed in 18 items, and it indicates that population policies on reproductive health and childbearing in the studied variables have been facing challenges. The main challenges included lack of experts in reproductive health policymaking, lack of sufficient evidence to make decisions, lack of attention to spatial planning infertility policy making, lack of a coordinated system between the Ministry of Health and other ministries, lack of ideological-based reproductive health policymaking, lack of attention to the socio-economic evaluation of population policies, and lack of long-term strategic and sustainable vision in health-based policymaking.

Conclusion: Population policies on reproductive health and childbearing after the revolution are not adequate for the country's decision-making system to achieve a proportionate and balanced population. Therefore, practical work and special responsibility accomplish the most promising demographic result.

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¹PhD Student in Political Science, General Policy, Islamic Azad University, Shahreza, Iran

²Assistant professor, Islamic Azad University, Shahreza, Iran

Correspondence:

Nafiseh Vaez, PhD;

Assistant professor, Islamic Azad University, Shahreza, Iran

Tel: +98 9132278217

Email: Vaezsh85@yahoo.com

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Introduction

Various attitudes toward population policies have been continuously observed after the Iranian revolution. In this orientation, notable differences have occurred in multiple positive or negative demographic areas.¹ Experts believe that demographic changes are a key and influential variable in all development planning, and policymakers should consider it. Demographic variables are the basis for all calculations that can accelerate or decelerate a country's development.² Literature shows that Iran, like most developing countries, has gone through demographic transitional stages with a fundamental decrease or increase in population, originated from policymaking, after the Second World War. Iran faced unprecedented and accelerated growth from 1951 to 1981; the average annual population growth in these four decades has been calculated to be 3% approximately, which is considered high growth considering the infrastructure. Because the population in Iran increased from 19 million in 1956 to 50 million in 1986, health indicators and their continuous improvement led to, on the one hand, a decrease in important mortality rates, especially in children and infants, and accelerated growth of the elderly population, on the other hand. Although it is an effective and favorable measure compared to the world, the aging indices were not followed at this time for various reasons and were not taken seriously. Therefore, the qualitative life expectancy has been constantly questioned.³ The ascending or descending trend of population growth, which mainly considers quantity, along with continuous socio-political developments per se, challenged policymakers and executives.⁴ In the second decade of Iran's Islamic Revolution, significant successes in population and family planning in the country decreased the birth rate and controlled the population somewhat. In this decade, the population growth rate dropped from 3.9% in 1976-1986 to 1.96% in 1986-1996 and rose to a growth rate of 1.61% in 1996-2006. Hence, demographic analyses indicate that after experiencing a decrease in fertility (Boy or Girl, Two is Enough), Iran has entered a new phase of demographic changes and attitudes.⁵ After the Islamic Revolution, policymakers have reached the reciprocal relations of effective variables in their studies, but they did not correctly use these relations in their policies as a practical government program; therefore, the numerous population and health problems did not go through a balanced and desirable process.⁶

The overall fertility rate in the country has decreased to less than 1.2 children per woman (replacement rate) as indicated by the general population and housing census in 2012. Policymakers, after many controversies, found that if this policy continues, the country's population will move towards premature aging in the next 20 years.⁷ Therefore, it is obvious that after the Islamic Revolution of Iran, population policies on reproductive health and childbearing have

fluctuated. These fluctuations have caused numerous sets of social, cultural, economic, and immigration problems, all of which have impacted the society's health which is the center of sustainable development. On the other hand, the approach of the Islamic government based on Islamic law and jurisprudence is a practical and determining component of population policies; examples of which are observed along with cultural issues of each region, race, and ethnicity. The main question is whether the population policies adopted in 1978-2020 have challenged decisions on reproductive health and childbearing. Is it possible to analyze and predict the consequences of population policymaking on the population and health? Was the alignment or non-alignment in this regard appropriately calculated? The research hypothesis is that despite making policies in different development plans after the revolution, governments have failed to maintain a strong will to observe policy-making knowledge in public policies such as population and health; moreover, according to the executive regulations, the Ministry of Health and Medical Education and other relevant ministries have not been able to meet the need of a coordinated system to raise society's awareness and cultural, economic, and social conditions.

Theoretical Foundations

Population policies; Population policy is a set of principles, measures, and written decisions on the population governments adopt in a country. It determines the scope of activities concerning social issues or matters with demographic consequences. The objective of population policy should be to rationalize and coordinate demographic changes with social, economic, and cultural conditions of society to provide greater welfare and well-being for the population. Unfortunately, some believe that population policy only considers "birth control". But the concept is broader and refers to all quantitative and qualitative population indicators. Also, fertility population policies have to seek a proportionate distance between births, rather than to give everyone excuses to think only of decreasing population. Hence, according to the circumstances, population policies and their reforms should always be taken care of on time, and they should never be neglected.⁸

Fertility is one of the key processes of population. It is the actual birth or reproduction of an individual or a social group. Without considering the individual fertility of women, the act of birth is intended infertility. And all policies must proceed so that families can intentionally choose the number of their children.⁹

Theoretical Foundations of Fertility-based Demographic Theories for a Logical Relationship between the Present Paper and Previous Papers

The significance of fertility in population policies

is that the most prominent and substantial factor of population policies is fertility and childbearing, i.e., most governments try to regulate, control, limit, or increase fertility to form population policies. Hence, it can be stated that population policy is based on fertility and childbearing.¹⁰ To explain this issue, four types of population policies, all affected by fertility, should be mentioned. In mortality-related population policies, the government tries to increase fertility and decrease mortality by increasing socioeconomic well-being or providing incentives. This procedure is more common in developed countries with negative population growth.¹¹ The second type of population policy is procreation policies. Because of the significant increase in the world population over the previous 50 years, birth reduction policies have been significant, especially in developing countries. In this case, we can exemplify the “One-Child Policy” by accepting all its consequences in China, which was mandatory, or the “Fewer Children, Better Life” in Iran. The objective of such a policy is to coordinate between family facilities and the number of children.¹² The third type of policy is marriage-related policies: In many cases, marriage at young ages increases divorce rate and other problems such as early pregnancy, and consequently, it endangers the mother’s and child’s health. Therefore, to fight such problems, governments always try to create awareness to prevent and postpone issues such as early marriage.⁹ Early marriage increases fertility while late marriage decreases fertility.

The fourth type of population policy is about migration. Migration has two kinds. Internal migration takes place within a country freely with fewer restrictions. Due to high population growth and high density, developing countries are dissatisfied with the distribution of their population. Consequently, they usually implement policies such as moving the people from large cities to small and remote cities, and creating new areas with the necessary facilities. External migration happens in developed countries such as Canada and Australia where they motivate immigration. This policy is often supported by experts. However, today developing countries with high fertility are attempting to dispatch their unemployed-expert population to developed countries. In addition to the flow of income to their countries, they get rid of socio-economic and political conflicts caused by unemployment. Therefore, considering the significance of fertility in population policies, the relevant theories are mentioned.¹³ As they are a good source of information, the answer to questions and hypotheses can be reached sooner. And also, they contain messages that greatly help analyze the results and suggestions of the paper and highlight the critical differences and similarities.

Leibenstein’s theory: This theory was proposed

in the 1960s. It is based on the practical and empirical assumption that the population growth rate is a function of the level of per capita income in society. Population growth is related to different stages of economic development. When the per capita income in a community is equivalent to the minimum wage level, birth rate and mortality are at the maximum level. In this case, the birth and mortality rates are equal, and the result of population growth is at the survival level.¹⁴

Becker’s theory: Families’ fertility behavior is affected by their economic behavior, not by recommendations followed by policies. Just as families make financial decisions about choosing a commodity, they also consider their preferences, tastes, income, and child-related expenses. In general, they decide to have children according to their incomes and expenses.¹⁵

Wallerstein’s periphery-core theory: Periphery-core theory experts mainly emphasize that demographic behavior, especially individuals’ fertility behavior is a reflection of their socio-economic status and necessarily their needs. Because of the workforce query, traditional agricultural societies, experience high birth rates and sexual preference in fertility since. According to Wallerstein, fertility behavior will change if material and cultural needs are modified. Perhaps this is why they have emphasized the effect of formal teaching (education) and informal education (through youth group organizations, radio, and television) that can create and change people’s needs. They believe people choose a fertility pattern that suits their needs.¹⁶

Social promotion theory: “A. Dumon,” a French philosopher is a pioneer in Social Promotion Theory. He believes that the number of children is closely associated to parents’ social status. In other words, families, like many underdeveloped agricultural societies prefer to have more children if they can promote their social status. This theory is based on the couple’s individual and psychological motivations about reproductive behavior and is one of the most fundamental theoretical subjects about fertility.¹⁷

Theory of cultural backwardness dissemination: This theory claims that fertility control is directly associated with the attitude of people who are familiar with the term “family planning” and contraceptives. Furthermore, it is based on the use of contraceptives by people so it is difficult to manipulate the attitudes.¹⁸

Theory of modernity: This theory believes that the environment modernization creates a kind of life and thinking style that weakens fatalism and family orientation and strengthens futurism and aspirations to achieve a prosperous life in human beings. Faust believes that studies include those personality traits that form part of the modernization process in explaining fertility. He considers urbanites to be literate and says that urbanites, using more and more

mass media, have the fundamental characteristics of a modern person, and the tendencies, attitudes, and values that one learns in school are in interaction with later life experiences; therefore, education will discourage reproduction among individuals. People with academic education prefer having fewer children with higher opportunities and facilities. Furthermore, they also pay attention to their well-being and do not challenge it with having more children.¹⁹

Hull's cultural theory: Hull believed that cultural changes lead to economic and social changes and ultimately reduced reproduction. If the leaders of society continue their policies to achieve the population goals and ignore other issues such as culture and ideology, reducing fertility will be decelerated because leaders do not make culture and ideology. Creating mobility requires fundamental changes. The ideological structure of government and family planning programs are interconnected elements that will play an influential role in fertility transfer. Just as the expansion of education and the change of the staff system has created a gradual development in family relationships, it has also encouraged people to have a smaller family.²⁰

Experimental Background

In this section, a collection of domestic and foreign backgrounds of the paper is reviewed as the experimental framework of the paper to present a summary of previous studies. The latest achievement in reproductive health and childbearing highlights the importance of such research. According to previous studies, women at reproductive age reported a decline in quality, promotion, and information about contraceptive methods and a rise in the cost of providing contraceptive methods compared to two years ago.²¹ The results also showed that gross national product (GNP), housing construction rate, unemployment rate, and inflation rate have the most significant impact on population policy decisions in developing countries.³ The studies also show that the population changes in Iran has created potential threats to society and policy-making by increasing reproduction and ignoring the factors, conditions, and low fertility contexts that will finally lead to failure.²² The results of similar studies showed that variables such as parents' education and age have a significant and inverse relationship with reproduction.²³ Iran's population reduction policies, which began in the 1990s, have caused an increase in the marriage age and families do not tend to have children.²⁴ The results show that the one-child policy in China has significantly reduced fertility. Such a combined change in population has a negative effect on human capital.²⁵ It was also found that old, middle-aged, and young families with fewer adult children make more savings.²⁶ Study entitled "Implementation of the Population Policy of Ethiopia: Achievements

and Challenges" showed that maternal fertility has significantly decreased due to education, and women's participation in education and labor has increased.¹⁰ Another study showed that population control policies had affected Chinese household savings.²⁶ Collectively, according to the backgrounds mentioned, it should be stated that population fertility policies include multiple policies from coercion to encouragement, which in the long run will have significant effects on the workforce and the economy. When fertility control is performed with cultural variables, a profound attitude change occurs that in the long run leads to reduced fertility and unwillingness to have children. It is also associated with countries' economic development. In Iran, the relationship between population and economy has not practically considered.

Methods

The objective of this paper is practical because it is to modify the negative consequences of population policies on reproductive health and childbearing by putting a more optimal path forward in operational plans. After investigating, reviewing, and analyzing previous studies, the authors prepared the report without prejudice.

This study has a survey-descriptive (field) design. To evaluate the research characteristics, the authors developed a Likert scale researcher-made questionnaire with a scoring system, including - I completely agree (5), I agree (4), somewhat (3), I disagree (2), I completely disagree (1). The reliability of the questionnaire was assessed using the retest method among 10% of the samples at two-week intervals, and the calculated Cronbach's alpha coefficient (0.84) was within the acceptable range.

The sample size included 30 specialists and managers (experts) who had at least 5 years of management experience in the fields of health policymaking, demography, development sociology, and other health fields with comprehensive knowledge of operational plans and regulations of the Ministry of Health and Treatment. Since the number of managers in Khuzestan University of Medical Sciences was high and scattered, the Delphi method was used. Data were analyzed at both descriptive and inferential levels. At the descriptive level, frequency and percentage were calculated, and at the inferential level, the adverse effects of population policies on reproductive health and childbearing were examined using a one-sample t-test. A total of 18 challenges in population policy-making on reproductive health and childbearing were investigated.

Results

The research findings were obtained at descriptive and inferential levels. At the descriptive level, Table 1 shows the demographic characteristics of the respondents.

Table 1: Description of demographic characteristics of the respondents

Variable	Classes	Frequency	Percentage
Gender	Male	23	77
	Female	7	23
Age	31-35 years old	2	7
	36-40 years old	7	23
	41-45 years old	11	37
	46-50 years old	4	13
Specialty	Health policy making	18	60
	Demography	6	20
	Development sociology	4	13
	Health	2	7
	Total	30	100

Table 2: One sample t test results on population policy making challenges in reproductive health and childbearing

Row	Item (Challenge)	Theoretical mean	Obtained mean	Std. deviation	Sig. level	Degree of freedom (df)	t value
1	Lack of sufficient knowledge about the state of reproductive health and childbearing	3	4.2000	1.21485	0.000	29	18.936
2	Lack of expert work and vision in reproductive policy making	3	3.9000	1.06188	0.000	29	20.116
3	Taste- and manager-oriented policy making	3	3.3667	1.29943	0.000	29	14.191
4	Lack of roadmap in reproductive policy making	3	3.6000	1.37966	0.000	29	14.292
5	Insufficient resources allocated to the fertility sector	3	3.3333	1.15470	0.000	29	15.811
6	Routine in reproductive health policy making	3	3.6667	1.39786	0.000	29	14.367
7	Prioritizing urgent measures over strategic measures	3	3.3333	1.21296	0.000	29	15.052
8	Lack of sufficient evidence and data needed to make decisions	3	3.2667	1.14269	0.000	29	15.658
9	Lack of attention to spatial planning in fertility policy making	3	3.7667	1.13512	0.000	29	18.175
10	Not taking the issue of monitoring and periodic and defensible reporting on the progress of plans seriously	3	3.1333	1.16658	0.000	29	14.711
11	Lack of a coordinated system between the Ministry of Health and other ministries	3	3.1333	1.33218	0.000	29	12.883
12	Lack of codified and agreed regulations for public policy-making processes	3	3.6333	1.03335	0.000	29	19.258
13	Lack or weakness in employing specialized human force	3	3.1333	1.00801	0.000	29	17.026
14	Lack of training in contraception (especially unintended pregnancies)	3	3.8333	1.28877	0.000	29	16.292
15	Lack of needs assessment in fertility and childbearing policy making	3	4.0667	1.11211	0.000	29	20.029
16	Ideological-based reproductive health policy making	3	4.2667	1.14269	0.000	29	20.451
17	Lack of attention to evaluating the socio-economic consequences of population policies before implementation	3	4.1333	1.10589	0.000	29	20.472
18	Lack of long-term and sustainable vision in fertility policy making	3	2.9000	1.34805	0.000	29	11.783

The statistics showed that 77% of the respondents, equivalent to 23 people, were male and 23% of the respondents, equivalent to 7 people, were female. Findings on the age of the respondents showed that 37%, equivalent to 11 people, were in the age range of 41-45 years, which was the highest number. Also, 23%, equivalent to 7 people, were in the age range of 36-40 years, 20%, equivalent to 6 people, were over 51 years old, and finally, 13%, equivalent to 4 people, were in the age range of 46-50 years and 7%, equivalent to 2 people, were in the age range of 31-35 years. In the respondents were from different cities of Khuzestan province working in Ahvaz Jundishapur University of

Medical Sciences. Regarding field of study, the results showed that 60% of the respondents, equivalent to 18 people, were in health policymaking experts who had the highest number. Also, 20%, equivalent to 6 people, had a demographic specialty, 13%, equivalent to 4 people, had development sociology specialty, and 7%, equivalent to 2 people, had health specialty (physician, health economics, health services management).

The second part investigated the challenges of population policies on fertility and childbearing. 18 indicators or challenges were obtained based on theoretical studies, which were provided to the

respondents for evaluation. Table 2 shows the results. According to the table results, if the significance level is below 0.05 and the t value is greater than +1.96, the item or indicator is considered one of the policymaking challenges in reproductive health and childbearing.

In general, according to Table 2, the significance level for all items was less than 0.05 ($P < 0.05$) and the t value was greater than +1.96 ($t\text{-value} > +1.96$). In other words, all items are statistically significant and considered a challenge. In a more detailed analysis, it should be said that lack of sufficient knowledge about the state of reproductive health and childbearing ($t\text{-value}=18.936$, $\text{sig}=0.000$), lack of expert work and vision in reproductive policymaking ($t\text{-value}=20.116$, $\text{sig}=0.000$), taste- and manager-oriented policymaking ($t\text{-value}=14.191$, $\text{sig}=0.000$), lack of roadmap in reproductive health policymaking ($t\text{-value}=14.292$, $\text{sig}=0.000$), insufficient resources allocated to the reproductive health sector ($t\text{-value}=15.811$, $\text{sig}=0.000$), routine in reproductive health policymaking ($t\text{-value}=14.367$, $\text{sig}=0.000$), prioritizing urgent measures over strategic measures ($t\text{-value}=15.052$, $\text{sig}=0.000$), lack of sufficient evidence and data needed to make decisions ($t\text{-value}=15.658$, $\text{sig}=0.000$), lack of attention to spatial planning in fertility policymaking ($t\text{-value}=18.175$, $\text{sig}=0.000$), not taking the issue of monitoring and periodic and defensible reporting on the progress of plans seriously ($t\text{-value}=14.711$, $\text{sig}=0.000$), lack of a coordinated system between the Ministry of Health and other ministries ($t\text{-value}=12.883$, $\text{sig}=0.000$), lack of codified and agreed regulations for public policymaking processes ($t\text{-value}=19.258$, $\text{sig}=0.000$), lack or weakness in employing specialized human force ($t\text{-value}=17.026$, $\text{sig}=0.000$), lack of training in contraception (especially unintended pregnancies) ($t\text{-value}=16.292$, $\text{sig}=0.000$), lack of needs assessment in fertility and childbearing policymaking ($t\text{-value}=20.029$, $\text{sig}=0.000$), ideologically-based reproductive health policymaking ($t\text{-value}=20.451$, $\text{sig}=0.000$), lack of attention to evaluating the socio-economic consequences of population policies before implementation ($t\text{-value}=20.472$, $\text{sig}=0.000$), lack of long-term and sustainable vision in fertility policy making ($t\text{-value}=11.783$, $\text{sig}=0.000$) were all significant as the challenges of population policymaking on reproduction and childbearing and are as the main challenges of population policy making on reproduction and childbearing.

Discussion

This study examined the adverse effects of population policies on reproductive health and childbearing in 1978-2020. It was hypothesized that the decisions of managers and families during these years due to hasty policies have faced challenges that may be intangible for

the society, but we see dissatisfaction and fluctuation of indicators followed by the population policymaking in the specialized body of health, which is continuous concern. An overview of all previous studies shows that all of them seek an answer for this question: when does the slogan of “the healthy human is the axis for sustainable development”, a population slogan, for the desired population of the country happen? Governments’ decisions have set the limits of their activities in the years after the revolution at great expense. Because the challenges of fertility and childbearing, and especially the main topic of the paper, have not yet convinced experts and the society that it has taken a step in the direction of the government, can we not, at best, achieve specific population goals whose all aspects are clear and create a proportion between the quantity and quality of the population for the most desirable population result, the dynamics of the proportion of the population on the way of changes is in the hands of policymakers. Policymakers who directly and indirectly manage the population in the area of power, policy-making. The nature of population policies in the field of health, especially population, fertility, and childbearing is complicated. Yet human beings are population policy’s axis. As results showed all items were statistically significant, while reproductive health and childbearing as the core of population policies after the revolution, are still needed to be analyzed, discovered and evaluated continuously and comprehensively with a conservative view. Policymakers who develop public policies are, in practice, executors too. The privacy and confidentiality of reproductive health information in Iranian culture, and the scope of reproductive health and childbearing service packages should be entirely considered. Very fast or very slow changes result from precipitancy in policymaking. The 18 challenges were lack of sufficient knowledge about the state of reproductive health and childbearing, lack of expert work and vision in reproductive policymaking, routine in reproductive health policymaking, prioritizing urgent measures over strategic measures, lack of sufficient evidence and data needed to make decisions, lack of attention to spatial planning in fertility policymaking (same version), Not taking the issue of monitoring and periodic and defensible reporting on the progress of plans seriously, and periodic and defensible reporting of program progress, lack of a coordinated system between the Ministry of Health and other ministries (welfare), lack of training in contraception (especially unintended pregnancies), lack of codified and agreed regulations for public policymaking processes, lack or weakness in employing specialized human force, ideological-based reproductive health policymaking (Islamic jurisprudence), lack of attention to evaluating the socio-economic consequences of population policies before and during implementation, and lack of long-term strategic and sustainable vision in health-based policymaking.

Indicators mean score showed lack of sufficient

knowledge about the state of reproductive health and childbearing with a mean of 4.20, lack of needs assessment in fertility and childbearing policymaking with a mean of 4.06, while ideological orientation of health and fertility policy with a mean of 4.26 and lack of attention to evaluating the socio-economic consequences of population policies before implementation with a mean of 4.26 had the highest mean score. Although work and measures are being implemented by developing numerous population policies, the desired and optimal population as their product still does not happen. The indicators should be constantly studied according to the country's time, place, and different situations. However, these values may vary in different structures despite their reliability and validity, leading to different results.

Conclusion

It should be explained that fertility rate depends on the cultural and economic situation, and the society's age structure. Also, the most prominent factors affecting the fertility rate are the literacy rate and the education level of women. Marriage age, child mortality rate, and the legitimacy and availability of family planning services are also the most important factors affecting fertility rates. The "total fertility rate" index, which was approximately 6.4 children in 1986, in the first development plan in 1988 (paragraph c, outlines of the country's birth control policy), decreased to approximately 4 children by 2011. But the results shows that the target was achieved in the early 1990s. The continuation of control activities was effective in such a way that in the target year of the plan, i.e. 2011, the value of this index decreased to approximately 1.74, instead of the set value 4. This decrease was not unique and reported earlier in other countries, but it raised the alarm of severe challenges in demographic changes i.e., the replacement level (fertility of approximately 2.1). To clarify, if we consider less than two children for each couple, this improper population replacement will lead to adverse population growth index after two or three generations and also disrupt the population's age structure. Failure to stop this process promptly will have irreparable consequences in various political, economic, social, and cultural fields. It seems expert work, roadmap, and long-term vision were not practiced when dealing the challenges of decision-making on fertility and childbearing. This event caused policymaking to proceed arbitrarily and ideologically; so that, in the beginning of the Imposed War, the fertility rate increased sharply because of the need to increase the population, so population control plans were abandoned. Similar studies show that fertility often undergoes profound cultural and political changes; leading to the countries' economic and social changes. Revolutions such as the Iranian Revolution, which needed revolutionary force and the upbringing of revolutionary generations, encouraged fertility rates. The researchers believed that

social revolutions with different goals could lead to a decrease or an increase in fertility. This issue makes it difficult to make decisions on fertility and provide the society's health, so it puts policymakers in a difficult situation. On the one hand, the government seriously encourage them to increase the population; on the other hand, the realities of society and the unpreparedness of households and infrastructure for further fertility will probably have negative consequences in the future, as we have seen in Iran. According to Blake, voluntary refusal of fertility occurs minimally in cultural-political changes because the social climate tends to increase fertility, and any violation is considered disrespect for the revolutionary governments' idealities and values.

Lack of codified family planning plan in the first decade was another challenge in decision making on health and fertility; therefore, urgent actions always outweighed long-term actions. This is the reason why reproductive and population policies in Iran are involved with short-term vision. This short-term vision causes spatial planning policy, ignoring the culture and economy of the regions in Iran. In many areas of Iran, the rural-nomadic texture inherently leads to increased productivity; however, These areas' employment and economic situation do not improve, leading to critical unemployment in these regions, such as the condition in Kurdish areas and Sistan and Baluchestan province. At the same time, policymaking in this field has been done without considering reliable data and without coordination with relevant ministries such as health or education, insurance, and the Ministry of Interior. At the same time, no practical attention has been paid to education in this regard; therefore, the behavior has not changed. Also, other findings of the present research showed that reproductive health policymaking in Iran has been based on ideology ignoring short-term and long-term consequences. This issue was the reason why households' needs and field data were not properly monitored, assessed, and recognized. In other words, policymaking in this field was hasty and imprecise. According to Stein, children's economic advantage or disadvantage is an influential factor for parents to decide how many children to have. Therefore, creating a kind of balance between economic satisfaction and childcare expenses forms the primary foundation of people's attitude towards the number of children. In modern society, children are not considered a lucrative commodity. Accordingly, most Western households have fewer or no children, while in Iran culturally and in terms of government ideology, having children is a multilateral obligation both from families and governments. This ideological and cultural dominance in Iran has caused severe challenges in fertility policymaking. Following Wallerstein's periphery-core theory, it should be stated that demographic behavior, especially fertility behavior of individuals, is a reflection of their socio-economic status and

necessarily their needs. So that, the need for workforce in traditional agricultural societies leads to high birth rates and sexual preference in fertility. According to Wallerstein, people's material and cultural needs should be changed; then we can expect change in people's fertility behavior. Perhaps this is why they have emphasized the effect of formal teaching (education) and informal education (through youth group organizations, radio, and television). Generally speaking, despite the major fertility challenges after the revolution, the major challenge in the current situation is the low desire to have children due to economic challenges and increased marriage age.

Altogether, the previous data, theories, and also the data produced in this paper confirm that population and health challenges should be the focus of all policymakers. Ignoring these issues may cause critical, serious, and irreversible consequences.

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